REPORT TO THE LEGISLATURE ON ABOVE GROUND OIL STORAGE TANKS

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ABOVE GROUND OIL STORAGE TANKS

Introduction

This report is submitted in compliance with Chapter 714 of the Public Laws of 2000. Chapter 714 required the convening of a Task Force by September 1, 2000 to review the current framework for regulating aboveground oil storage tanks (AST's). The Task Force is charged with evaluating and making recommendations on the following: whether the requirements relating to AST's are adequate, whether the correct agencies are in charge of regulating these tanks, and whether the resources to properly regulate AST's exist.

The Task Force was required to submit an initial report on field-constructed bulk storage tanks by March 1, 2001 and to submit a final report on all AST's by January 2, 2002. On February 28, 2001, the Task Force submitted a report indicating that there is limited data to support the isolation of field-constructed tanks from the larger universe of AST's. The Task Force reported that it therefore wished to combine reporting on field-constructed tanks in this final report to the Joint Standing Committee on Natural Resources. This report is attached as Appendix 1.

The Task Force includes representation from the following member organizations:

Department of Environmental Protection
Office of the State Fire Marshal
Oil & Solid Fuel Board
Maine Oil Dealers Association
Maine Petroleum Association
Maine Pulp & Paper Industry
Maine State Chamber of Commerce
Maine Fire Chiefs' Association
Maine Municipal Association
Federal Facilities, Brunswick Naval Air Station
Friends of the Royal River
Maine Water Utilities, Consumer's Water Company

The Task Force met 17 times. Meeting summaries are available on request.

In this report, the Task Force addresses home heating oil tanks separately from other, larger AST's, as these two universes raise different concerns. Home Heating Oil Tanks are discussed in Section 1. All other AST's, including field-constructed tanks, are addressed in Section 2. A separate statement by the Maine Oil Dealers Association concerning Section 2 follows the body of the Report.

Executive Summary

Section 1: Summary of Conclusions and Recommendations Concerning Home Heating Oil Tanks

Question #1: Are current regulatory requirements governing home heating oil tanks adequate?

Answer: The Task Force concluded that the existing regulatory requirements are adequate.

The Task Force acknowledges and supports the continuing efforts of the Oil and Solid Fuel Board concerning the new rule changes that will result in less releases of petroleum from home heating oil tanks.

The Task Force recommends continuance of the current Home Heating Oil Tank replacement program for residential households and sensitive geological areas.

The Task Force recognizes that driver and technician training is essential to avoid spills. The task force acknowledges and supports current industry and OSFB efforts and further encourages the industry to fully implement the training and education programs that are underway.

Question #2: Are the appropriate agencies responsible for regulating home heating oil tanks?

Answer: The Task Force agreed that the appropriate agency - the Oil and Solid Fuel Board - is responsible for the regulation of home heating oil tanks.

Question #3: Are current resources adequate to regulate home heating oil tanks properly?

Answer: The Task Force concluded that current resources are adequate to regulate home heating oil tanks properly.

Section 2: Summary of Conclusions and Recommendations Concerning Non-Home Heating Oil Aboveground Tanks

Question #1: Are current regulatory requirements governing non-home heating aboveground oil tanks adequate?

Answer: The Task Force analyzed existing state and federal regulations and concluded that existing regulatory requirements provide adequate protection. The Task Force found, however, the enforcement and compliance gaps identified in this report. Some of these gaps can be addressed by interagency cooperation or by providing additional resources. The Task Force concluded that legislation is needed to address the lack of enforcement of federal environmental Spill Prevention Control and Countermeasures (SPCC) regulations. Because of time constraints,

the Task Force was not able to determine whether requirements should be created to address siting issues and recommends further study of this question.

Question #2: Are the appropriate agencies responsible for regulating non-home heating AST's?

Answer: The Task Force concluded that the appropriate agencies are responsible for administration of existing state regulatory requirements, except in the area of permitting of non-home heating oil supply tanks. Specifically, the Task Force concluded that the OSFM is the appropriate agency to enforce fire protection codes for non-home heating oil storage tanks and that DEP is the appropriate agency to administer environmental protection provisions governing underground piping associated with ASTs and environmental provisions governing marine oil terminals. The Task Force concluded that clear permitting and enforcement authority over non-home heating oil supply tanks should be provided to the OSFM.

Question #3: Are current resources adequate to regulate non-home heating AST's properly?

Answer: The Task Force concluded that additional resources are needed for DEP to enforce the federal SPCC requirements. The Task Force concluded that additional resources are needed for OSFM to enforce NFPA requirements pertaining to both storage and supply tanks. The Task Force recommends that in combination with the approximately $85,000 currently allocated annually from the Ground Water Oil Clean-up Fund, 3.5 positions in the OSFM be dedicated to work on AST's (specifically, 3.0 positions funded by the Ground Water Oil Clean-up Fund and .5 position funded by a permit increase).

MODA does not join in these recommendations in their entirety. A separate statement by MODA follows the body of this report.

Section 1: Conclusions and Recommendations Concerning Home Heating Oil Tanks

The Task Force reviewed much information and data presented by the DEP and the industry regarding the status of aboveground home heating oil tanks. The Task Force, following the guidelines stated in the enabling legislation, asked questions and reached the accompanying conclusions. Below are the questions asked, the conclusions reached and the discussion underlying the Task Force's results.

Question #1: Are current regulatory requirements governing home heating oil tanks adequate?

Answer: ***The Task Force concluded that the existing regulatory requirements are adequate.***

Discussion:

The installation of home heating oil tanks is regulated by the Maine Oil and Solid Fuel Board (OSFB). A technician must obtain a license from the OSFB in order to install heating equipment which includes the heating oil tank. Homeowners may install a tank in their residence without being licensed by the OSFB. All installations, whether done by a licensee or a homeowner must be done according to code. The OSFB has its own set of installation regulations and further adopts the National Fire Protection Association (NFPA) code, NFPA 31, that specifically addresses installation standards.

In order to determine the regulatory adequacy surrounding aboveground home heating oil tanks, the task force reviewed DEP spill information, which indicates, to the best of DEP staffs' ability, the number, nature, and cause of spills associated with these tanks. This information is attached in Appendix 2. After reviewing the spill data and the current regulatory, industry and public efforts, the Task Force concluded that the existing regulatory requirements are adequate. The Task Force arrived at this conclusion by asking the basic question:

- **What are the top causes of spills from Home Heating Oil Tanks and what is being done about them?**

Industry estimates that there are approximately 300,000 home heating oil tanks and of those, approximately 100,000 are located outside. According to DEP data, corrosion, physical breakage, overfill, piping, and loose fittings are the major causes of spills from this total. Corrosion of underground piping is especially of concern as it may go unnoticed for an extended period. What is being done to address these issues?

X ***The Task Force acknowledges and supports the continuing efforts of the Oil and Solid Fuel Board concerning the new rule changes that will result in fewer releases of petroleum from home heating oil tanks.***

The OSFB and industry have been aggressively dealing with spills related to home heating oil tanks. Working together, the OSFB, industry, and the DEP have created very substantial and proactive rules. These rules are some of the most aggressive in the nation. Below are some of the specific regulations and efforts that are addressing the spills from these tanks.

1. Current OSFB rules require that whenever a system has major work done to it, the whole system - including the tank - must be brought up to current standards. This includes both indoor and outdoor tanks. This means that all tanks will be upgraded as the system is upgraded. Old, corroded, or unstable tanks will be required to be replaced.

2. Current OSFB rules require the removal of unprotected underground oil supply lines - a problem identified and recognized as a significant cause of product releases. Current law prohibits the installation of unprotected buried lines.

3. Current OSFB rules require the updating of <u>all</u> outside tanks by February 2003. Old corroded, unstable or out of code tanks will either be replaced or upgraded. The Task Force recognizes that achieving this goal will be a very substantial undertaking. The OSFB will be embarking on a significant public education effort in conjunction with the DEP in order to alert the public as to these updating requirements. These efforts will include but are not limited to: Public service announcements; technician training, and; CAP agency, real estate, home inspector training and notification. Industry likewise is initiating notification to customers of this requirement.

4. New OSFB rules address physical breakage by requiring the placement of a tank so that it cannot be affected by falling or accumulating snow.

5. The new OSFB rules require a filter, valve, and piping cover for outside tanks to protect against snow build-up, falling ice, snow, and accidental breakage.

6. The removal from NFPA 31 of the section that allowed the use of a 55-gallon drum for use as a fuel oil supply tank. With the adoption of the 2001 edition of NFPA 31, the installation of a 55-gallon drum will no longer be allowed in the State of Maine.

7. Industry and the OSFB have created an annual checklist for technicians to use and leave for the homeowners that is an inspection of the tank and will notify the tank owner of any problems. This checklist is now a recommendation of the OSFB and is attached to the rules as an appendix.

8. Industry in conjunction with lending institutions has created a smart energy investment program to assist homeowners financially with upgrading their heating systems.

9. Industry has sent out over 200,000 "Is your Tank In Shape " brochures which encourage homeowners to inspect and upgrade their tanks.

10. The Task Force made a specific recommendation to require technicians to remove the fill pipe when removing an oil storage tank in order to prevent the accidental filling of a non-existent tank. This recommendation has already been adopted by the Oil and Solid fuel Board and is now current law.

Other Programs and Steps taken to Address Home Heating Oil Tanks:

- **Steps taken to increase the safety and longevity of fuel supply tanks**

The manufacturer's of the fuel oil tanks have, and continue to address the importance of a safe, but affordable tank to contain fuel oil. The majority of the steel tanks being installed today are UL-80 constructed tanks. The use of a bottom outlet tank helps reduce the build up of sludge and water in the bottom of the tank, which leads to premature failure of the tank bottom. If the tank is not UL listed, the OSFB codes require the tank to be pressure tested to insure that the tank is not defective.

There are several areas manufacturers are looking at to provide a better and safer product. A non-corrosive liner is being developed for use on steel tanks that would remove the risk of a tank failing from internal corrosion. Already on the market is a double containment tank designed for use in residential applications. The internal tank is non-metallic with a metal outer jacket for containment in case of a leak or rupture of the inner tank. These tanks are currently being used in several environmentally sensitive areas.

- **State Home Heating Oil Tank Replacement Program**:

The Task Force recommends continuance of the current Home Heating Oil Tank replacement program for residential households and sensitive geological areas.

1. Low Income program

This is the existing program run through the local Community action agencies and administered by the DEP that replaces inferior tanks with new ones for low-income people - as well as replacing tanks in sensitive areas (no income qualifications). The program uses money from the Ground Water Oil Clean up Fund, a fund created by a tax on petroleum products, to allow the local community action agency to replace those tanks in greatest need of repair for households that qualify under income guidelines set out in the Low income heating Assistance program (LIHEAP). This replacement program has recently become a permanent program after two years as a pilot. Funding for this program is $1,000,000 per year. To date more than 2000 tanks have been replaced. (See Appendix 3.)

2. Sensitive area program

This program also has a second purpose and application and that is to replace tanks in extremely sensitive geologic areas. This second part of the program is run entirely through the DEP and

replaces tanks where, using explicit guidelines, replacement of tanks would provide the best preventive measure to protecting a valuable water resource.

- **Education and Training:**

The Task Force recognizes that driver and technician training is essential to avoid spills. The task force acknowledges and supports current industry and OSFB efforts and further encourages the industry to fully implement the training and education programs that are underway.

Technicians:

The compliance officers for the Oil and Solid Fuel Board provide code seminars to licensees, code enforcement officers, fire inspectors, and community action program inspectors. These seminars are offered to licensees when any substantial code changes are implemented and then are offered on a per request basis to all interested parties. In the past 15 months, the OSFB has conducted 36 seminars concerning code requirements adopted by the OSFB.

Drivers:

The compliance officers have developed a presentation especially for delivery drivers that are offered upon request by the oil companies. This presentation is designed to make delivery drivers aware of the tank installation being filled and will hopefully reduce the number of overfills of residential tanks.

Further, the MODA Safety Committee has completed work on a major project, of which a part is training of drivers on deliveries of fuel and preventing spills. The MODA safety committee training manual has been finalized and the delivery section is based on the API manual. The MODA Safety committee will ensure distribution of this manual and instruction to companies for use and education of drivers. This fall the MODA safety committee chairperson has embarked on a tour around the state explaining and distributing the safety manual to all oil dealers.

Public:

The Oil and Solid Fuel Board in conjunction with the Department of Environmental Protection and Maine Oil Dealers Association have distributed a public service announcement concerning the 2003 requirement for updating all outside fuel oil tanks to current code requirements. The PSA will be seen on television and in the newspapers to help the public become aware of this requirement.

<u>Question #2</u>: Are the appropriate agencies responsible for regulating home heating oil tanks?

Answer*: The Task Force agreed that the appropriate agency - the Oil and Solid Fuel Board - is responsible for the regulation of home heating oil tanks.*

Discussion:

As evidenced by the existing comprehensive regulatory scheme and the expertise of the Oil and Solid Fuel Board Compliance officers as discussed throughout this document, it is clear that the jurisdiction of Home Heating Oil Tanks should remain with the Oil and Solid Fuel Board.

Question #3: Are current resources adequate to regulate home heating oil tanks properly?

Answer: *The Task Force concludes that current resources are adequate to address home heating oil tanks.*

Discussion: It would helpful if more compliance officers could be added to the existing three at the OSFB but given budgetary issues it is unlikely that any new positions will be forthcoming. However, even with only three inspectors, these inspectors respond to every complaint, have brought and continue to bring cases against unlicensed individuals and licensed individuals who do shoddy work, and have overseen the estimated 90+% compliance rate with the buried-line upgrade requirement.

Section 2: Conclusions and Recommendations Concerning Non-Home Heating Oil Aboveground Tanks.

This section sets out the Task Force's conclusions and recommendations concerning all non-home heating oil AST's, including field-constructed tanks.

Question #1: Are current regulatory requirements governing non-home heating oil tanks adequate?

Answer: *The Task Force analyzed existing state and federal regulations and concluded that existing regulatory requirements provide adequate protection. The Task Force found, however, the enforcement and compliance gaps identified below. Some of these gaps can be addressed by interagency cooperation or by providing additional resources. The Task Force concluded that legislation is needed to address the lack of enforcement of federal environmental Spill Prevention Control and Countermeasures (SPCC) regulations. Because of time constraints, the Task Force was not able to determine whether requirements should be created to address siting issues and recommends further study of this question.*

Discussion:

1. Current Regulatory Requirements and Industry Standards Governing AST's

A number of different state and federal regulations pertain to aboveground storage tanks (ASTs) depending on size, location, use of tank, and product stored. These regulations overlap in some instances and in other instances gaps were identified by the Task Force. Additionally, the Task Force reviewed various industry programs and standards pertaining to ASTs. A summary of state and federal regulations and industry standards is found in Appendix 4.

Fire Protection Standards Governing Storage Tanks: Office of the State Fire Marshal

State law requires that storage tanks over 60 gallons (except those at federal facilities) meet National Fire Protection Association Code 30 (NFPA 30) standards in effect at the time tanks were built. (See 25 MRSA Sec. 2482 et seq.) This law is administered by the Office of the State Fire Marshal (OSFM). State law requires that owners of such tanks obtain a permit from the OSFM at the time the tanks are built.

NFPA 30, as with all NFPA standards, are model codes that are adopted by many states as the backbone of their fire protection codes. NFPA 30 requires, for example, diking, venting, and set-backs from boundary lines. A workgroup of governmental and industry representatives updates each code approximately every 3 years to take in to account new fire protection measures. Maine law does not require AST facilities to upgrade to meet NFPA standards put into place after the

date the facilities were permitted. When facilities are built without being permitted, such facilities are required to meet standards in effect at the time they come to the attention of the OSFM.

Installation Standards Governing Supply Tanks: Oil and Solid Fuel Board

Title 32 MRSA, Chapter 33 grants the Oil and Solid Fuel Board jurisdiction over the installation and repair of oil and solid fuel burning equipment, including accessory equipment. Fuel oil supply tanks are part of the accessory equipment regulated by the Oil and Solid Fuel Board. The Oil and Solid Fuel Board has adopted NFPA 31 for the installation of oil-burning equipment. NFPA 31 includes the installation of fuel oil supply tanks connected to all oil-burning equipment regulated by this standard. (For further discussion, see Question #2, below.)

Environmental Protection Provisions Governing Underground Piping and Marine Oil Terminals: Maine Department of Environmental Protection / Oil and Solid Fuel Board

Marine oil terminals are currently covered by federal and state environmental protection, as well as fire prevention laws. Tanks at marine oil terminals are subject to comprehensive state environmental regulation addressing siting, design and construction, and operation. (Chapter 600). The state environmental standards are administered by Maine DEP.

State underground piping law 38 MRSA 570-K was enacted in 1991 to prevent the installation of bare steel piping at AST facilities. This law gave owners who did not have conforming piping (piping protected against corrosion or made of non-corrosive materials) until July 1 1995 to upgrade their piping to the current laws (MRSA 564, 565 and 566-A) and their corresponding rules (Chapter 691-UST rules). 570-K allows pre-existing single-walled conforming piping to stay in the ground, but requires any new and replacement underground piping to have secondary containment with continuos interstitial space monitoring in accordance with the current standards in Chapter 691-UST Rules. In 1999 the law was amended to include standards for proper operation, maintenance and removal of underground piping at AST facilities.

Heating oil tanks that have buried piping used to store #2 heating oil and other home heating oil, and are 660 gallons or less in capacity or an aggregate tank capacity of 1320 gallons or less are exempt from this law. The OSFB promulgated rules in February 1998 that required new buried lines to be sleeved, as well as requiring the retrofitting of buried copper supply lines by September 2000. (See the Home Heating Oil section).

State Emergency Preparedness Registration: MEMA

The Maine Emergency Management Agency (MEMA) administers the Emergency Planning and Community Right to Know Act, which requires an annual inventory of facilities that store hazardous materials. MEMA has the responsibility to monitor and coordinate data collection

from facilities that are required to submit chemical inventory reporting forms, to monitor compliance with registration requirements, and to conduct inspections to determine compliance with registration requirements. All facilities storing over 1,550 gallons of petroleum are required to report annually to MEMA with information such as number of tanks, location of facility, and chemicals stored, (38 MRSA § 797) as well as pay registration fees. Information gathered by MEMA is provided to state and local emergency response entities for planning and training purposes. MEMA estimates that there is between a 30-80% compliance with this registration requirement, varying by county. The compliance range reflects that MEMA does not conduct inspections to enforce the registration requirement.

Federal Environmental (SPCC) Regulations:

Under the Clean Water Act, as amended by the Oil Pollution Act of 1990, any facility that stores in excess of 660 gallons in a single aboveground tank or an aggregate of more than 1,320 gallons in aboveground tanks (or in excess of 42,000 gallons in underground tanks) must comply with Spill Prevention Control and Countermeasure (SPCC) rules if, due to its location, the facility could reasonably be expected to discharge oil into or upon the "navigable waters" of the United States or adjoining shorelines. Navigable waters are broadly defined to include water bodies used for both commercial and recreational purposes. A facility can be reasonably expected to spill into navigable water if it is in proximity to a pathway such as a storm sewer or tributary that leads to navigable waters. Section 311 of the Clean Water Act requires facilities that handle, transport or store oil to prepare and update written SPCC Plans. Such plans are required to help prevent or contain spills and keep oil from polluting streams, rivers and other bodies of water (40 CFR Part 112). EPA's regulations do not expressly address threats to groundwater or to natural resources other than surface water. EPA representatives indicated, however, that all or virtually all Maine facilities with 1,320 gallons in AST's fall within the scope of Section 311 and are required to have SPCC plans.

Generally, a SPCC plan is required to include the following: 1) a description of the facility including a summary of the tanks, piping and drums, etc., as well as drainage paths and potential spill scenarios; 2) spill prevention by training, and through inspections and testing procedures, and control by equipment, such as diking and overfill devices; 3) counter-measures including clean-up equipment and spill reporting procedures; 4) a comprehensive review of the plan every 3 years which includes evaluation of more effective prevention and control technology; and 5) the plan is continuously amended to include facility changes which materially affect the facility's potential to discharge (e.g., additional tanks, fueling areas, etc.) or which address the cause of an actual discharge. A Professional Engineer must certify the SPCC plan, as well as any amendments. The facility is required to keep a copy of a SPCC plan on site. There is no initial requirement that SPCC plans by themselves be submitted to EPA. Facilities that could cause "significant and substantial harm" must submit a Facility Response Plan (FRP) which may incorporate elements found in an existing SPCC plan or both plans may be merged into an Integrated Contingency Plan (ICP)(see "Compliance Gaps, SPCC" below). In the case of a threshold spill EPA can require a facility to submit the plan for review.

Industry Programs and Standards:

The Task Force briefly reviewed a number of programs, standards, and recommended practices that the petroleum industry uses to guide the management of terminals and tanks in a manner that ensures worker and public safety and protects the environment. A number of the standards have been incorporated into Maine regulations as operational requirements, such as API 653 inspections for tanks covered by DEP marine oil terminal regulations. Of the 500 equipment and operating standards which have been developed, a number are followed by some AST operators in Maine. A listing provided to the Task Force is contained in Appendix 5.

2. Spill Data

Based on data currently available, DEP identified 707 spills from non-residential, non-marine oil terminal ASTs in 1995-1999 (this period was utilized since the data were first presented to the Task Force in October 2000). These spills involve a broad range of petroleum products, from a variety of facility types (see Appendix 6).

Through August 2001, approximately $2.0 million in state cleanup dollars and an unknown amount of private funds have been spent addressing these releases. These expenses may increase as remediation continues at some of these sites. Categorizing state expenditures by facility type and fuel category indicates gasoline releases from ASTs at service stations resulted in the largest expenditure of state funds (see Appendix 6).

A variety of causes led to these spills. The largest cause is overfilling, but other significant problems identified include tank corrosion, physical breakage, piping failure, loose fittings, and human error (see Appendix 6).

Data reviewed by the Task Force confirmed that gasoline spills from AST's that threatened water supplies between 1995 and 1999 are the most expensive to clean up. The state has spent approximately $2.0 million through August 2001 on the 707 spills from non-residential, non-marine oil AST's reported to DEP between 1995 and 1999. Thirteen gasoline spills at service stations and bulk fuel plants (2% of the total 707 spills) that threatened water supplies account for $903,930 of the total spent to date. This is a large portion (44%) of the approximately $2.0 million.

3. Compliance Gaps

Lack of a Statewide Inventory of AST's

There is currently no statewide AST inventory such as the DEP UST database. Accordingly, state agencies currently lack the means to quantify the number of ASTs in Maine or ascertain their locations, share data, or communicate effectively with AST owners in a cost-effective manner. While MEMA has a reporting requirement for AST's over 10,000 lbs. (1550 gallons), this database is believed to be incomplete and limited in flexibility and access.

The Task Force determined that MEMA had compiled a database of existing ASTs, which was different than, but overlapping some, other databases of ASTs compiled by DEP, Dept. of Agriculture and the State Fire Marshal. The Task Force believes that a universal interagency database is necessary in order to avoid duplication and provide accurate information to both the state and public. Therefore the Task Force is not recommending establishing a new registration requirement at DEP, but enhancing the current information by requiring a universal database.

Four agencies, MEMA, DEP, OSFM and OSFB have begun work on a cooperative effort to overcome those difficulties and limitations. MEMA has begun work reviewing OSFM's AST permits for additional information. DEP and MEMA are working on an upgrade to the current DEP UST data base and data storage that will improve it's functionality and allow the inclusion of AST data. When completed at the end of 2002, the database will be available to all four agencies on the statewide area network.

The database upgrade is jointly financed through existing MEMA (fee registration) and DEP (Ground Water Fund) sources. Work to create the upgrade will be outsourced to a consultant, and therefore will not require additional staff. MEMA staff will handle the data entry into the new system as they do now in their current AST reporting. DEP will maintain the database at DEP and make it available to all four agencies. Maintenance and quality control will be a portion of the duties of the new DEP ES III position identified later in this report.

SPCC

The variety of spill causes discussed above suggests that an approach at the facility level that looks at both equipment and operations may offer the greatest prospect for minimizing future releases. The AST Task Force looked closely at existing federal SPCC requirements, and the adequacy of federal enforcement efforts. The Task Force met with representatives of EPA, and assessed current federal SPCC compliance efforts. Generally, the Task Force found the following:

- Federal SPCC planning and implementation requirements are, in concept, adequate to protect the environment. If properly executed by the regulated community, and monitored by the EPA, existing SPCC regulations would meet the purposes of environmental protection and drinking water safety.

- However, based on our conversations with EPA officials, the Task Force is uncertain to what degree current SPCC requirements are being met throughout Maine. Outside of regular EPA presence at some large Maine facilities, EPA SPCC inspections are infrequent or non-existent, especially at smaller facilities.

- Additionally, EPA's capacity to inspect SPCC compliance in Maine is very resource-limited, and as a result, many regulated facilities are not receiving regulatory review of their SPCC compliance.

The SPCC program has no state authorization and a very limited federal presence in Maine. The federal EPA limits their inspections to a 5 years schedule of around 30 facilities which include those which could cause "significant and substantial harm" (either 42,000 gallons of capacity and transfer to/from vessels, or 1,000,000 gallon of capacity, plus other threat factors described in 40 CFR 112.20), thus requiring a FRP, as well as federal facilities which are regulated under EPA, USCG, and the Office of Pipeline Safety. EPA also performs post (threshold) spill inspections at SPCC regulated facilities as well as on request inspections at these facilities for concerned parties such as the state or private citizens. In fiscal year 2000 and 2001 EPA inspected a total of 13 and 9 facilities in Maine respectively.

As a result of these findings, the Task Force recommended that DEP submit legislation to the 2nd session of the 120th Legislature designed to authorize DEP inspection of SPCC plans. The Task Force concluded that DEP is the appropriate agency to undertake this responsibility because it has engineering expertise and SPCC experience, it is the most capable of administering the program because it has enforcement and contract administration capability, it is experienced in cleaning up spills and ascertaining the cause of spills, and it has lines of communication with EPA. The Task Force notes further that the agencies on the Task Force agreed that DEP is the appropriate agency to undertake SPCC responsibility. (This proposed legislation is found in Appendix 7.) The Task Force specifically agreed that such authority was intended as a way to compensate for EPA's inability to monitor SPCC compliance, and was not intended as an expansion of the existing federal program in any way. DEP has agreed that it will be guided in its efforts by existing federal SPCC practice, procedure and precedent, and DEP will consult with EPA before ruling on difficult SPCC compliance issues.

MODA does not join in this recommendation. A separate statement by MODA follows the body of this Report.

Siting

The Task Force discussed the fact that there are no federal or state standards specific to the siting of AST's. With the introduction of Public Law 2001, Chapter 302 regulating the siting of underground oil storage tanks (UST's) for the protection of public and private water supplies, the Task Force explored the question of whether the expansion of Chapter 302 to include AST's would be appropriate.

Based on its review of spill data, the Task Force concluded that spills that threaten water supplies are unusually expensive and burdensome. The Task Force recommends further study on the issue of siting of AST's. The Task Force acknowledged that while a general expansion of Chapter 302 for all AST's might introduce unnecessary regulatory oversight, siting regulations for certain products proposed for storage in AST's deserves study.

The Task Force recommends that the Department and the Drinking Water Program make recommendations to the 121st Legislature in January 2003, and meet with stakeholders or convene a working group as appropriate as part of their process to prepare such

recommendations.

In preparation for further discussion, the Task Force also recommends the addition of two questions on the application form required by the OSFM as soon as possible for any new AST installation. These two questions are:

1. Is this AST installation within 300 feet of a private water supply?
2. Is this AST installation within 1000 feet of a public water supply?

The OSFB will provide information concerning location of installation to DEP, where staff will also determine whether the AST will be in the mapped source water protection area of a public water supply. This information will enable the gathering of data on where new ASTs are located, albeit for a limited period of time before the January 2003 recommendation is due.

Question #2: Are the appropriate agencies responsible for regulating non-home heating AST's?

Answer: *The Task Force concluded that the appropriate agencies are responsible for administration of existing state regulatory requirements, except in the area of permitting of non-home heating oil supply tanks. Specifically, the Task Force concluded that the OSFM is the appropriate agency to enforce fire protection codes for non-home heating oil, storage and supply tanks and that DEP is the appropriate agency to administer environmental protection provisions governing underground piping associated with ASTs and environmental provisions governing marine oil terminals. The Task Force concluded that clear permitting and enforcement authority over non-home heating oil supply tanks should be provided to the OSFM.*

Discussion:

Permitting and enforcement authority over supply tanks

Title 32 MRSA, Chapter 33 grants the Oil and Solid Fuel Board (OSFB) jurisdiction over the installation and repair of oil and solid fuel burning equipment, including accessory equipment. Fuel oil supply tanks are part of the accessory equipment regulated by the OSFB. The OSFB has adopted NFPA #31 for the installation of oil-burning equipment. NFPA #31 includes the installation of fuel oil supply tanks to all oil-burning equipment regulated by this standard. All installations done by licensees of the OSFB must be made according to the adopted standards of the OSFB. If an installation is made in violation of the adopted standards, the licensee must make the appropriate corrections. When violations of the installation standards are found by an inspector, an order of correction is issued with appeal rights to the OSFB. The OSFB has had no significant enforcement issues with this class of tanks. Most installations of non-home heating oil tanks, especially over 2,000 gallons, are designed by engineers and installed by licensed technicians. The OSFB does not require a permit for the installation of any size fuel oil supply tank, therefore, the most common cause for an inspector of the OSFB to inspect an installation is a request from a code enforcement officer, fire department, tank installer, or project manager.

Since permits are not required, the OSFB does not have a mechanism to determine the number of tanks that are being installed annually. An estimate of 200 installations of new AST's is probably realistic.

The Office of the State Fire Marshal (OSFM) currently reviews and permits installations of oil storage facilities for code compliance. By adding installation of non-home heating fuel oil supply tanks over 1320 gallons to their review process, another step in protecting the environment and ground water would be provided. This would help insure the installations are being made in a safe location and being properly designed and installed in all installations. Permitting is already part of the OSFM review process and could be easily expanded to include non-home heating oil supply tanks.

This change would require statutory grant of authority in Title 25 to OSFM to require permitting of non-home heating oil supply tanks over 1320 gallons. (This proposed legislation is found in Appendix 8.) This authority would not supersede the OSFB's authority to inspect the piping for these tanks on request of the owner, installer, or code enforcement officer. The piping must still be made according to NFPA 31 and the Rules and Regulations of the OSFB.

The effective date of any change by legislation should provide ample time for notification of regulated parties. A time frame of 18-24 months would be ample. The proposed legislation therefore provides for an effective date of January 1, 2004.

Question #3: Are current resources adequate to regulate non-home heating AST's properly?

Answer: *The Task Force concluded that additional resources are needed for DEP to enforce the federal SPCC requirements. The Task Force concluded that additional resources are needed for OSFM to enforce NFPA requirements pertaining to both storage and supply tanks. The Task Force recommends that in combination with the approximately $85,000 currently allocated annually from the Ground Water Oil Clean-up Fund, 3.5 positions in the OSFM be dedicated to work on AST's (specifically, 3.0 positions funded by the Ground Water Oil Clean-up Fund and .5 position funded by a permit increase).*

MODA does not join in these recommendations in their entirety. A separate statement by MODA follows the body of this report.

Discussion:

Enforcement of federal SPCC requirements:

DEP anticipates enforcement of the SPCC requirements will encompass two levels of activities. First, relying in large part upon the development of the state AST inventory and the proposed certifications to the MEMA registration process, DEP's first priority will be to ensure that Maine

AST facilities subject to the federal requirement have a SPCC plan. Second, periodic inspections of facilities certifying they have a SPCC plan will be necessary to determine whether the certification is valid and the facilities are implementing the plan as written.

DEP expects to perform the routine inspection activities necessary to support the SPCC program principally through the use of private contractors, at an expected cost of approximately $50,000 annually. This level of expenditure, coupled with DEP staff inspections, should result in approximately 250 facility visits per year. Although DEP does not intend to inspect facilities already inspected by EPA, the department will still need to target its inspections resources for other facilities based upon potential risk, given the estimated 4,000 ASTs potentially subject to SPCC requirements.

DEP will require one additional staff to help maintain the AST inventory, administer and enforce the new certification requirements on the MEMA registration form, perform inspections, and manage the private contractor inspection activities. The Task Force therefore recommends that DEP be given position and funding authority for an ES (Environmental Specialist) III position. The proposed funding source for the contract dollars and the additional staff is the Ground Water Oil Clean-up Fund, since these program enhancements are intended to minimize future Fund cleanup expenditures. (See the DEP Ground Water Oil Clean-up Fund Report submitted to the Legislature December 15, 2000.)

MODA does not join in this recommendation. A separate statement by MODA follows the body of this report.

Enforcement of NFPA Requirements

The OSFM receives approximately 70 permit applications for new or replacement tanks annually. At this time, the OSFM has ½ FTE (full-time equivalent) inspector available to perform inspections of AST's and other duties and has no clerical staff assigned to AST duties. Because of lack of resources, the OSFM inspects only a small percentage of facilities seeking permits and responds immediately only to complaints alleging extreme hazard. Other complaints are investigated only after a long delay, or not at all. Last year, the inspector performed a total of approximately 75 inspections, of which approximately 20 were associated with permit applications; the remainder were conducted in response to complaints of code violations. The OSFM needs additional staff to perform inspections associated with current responsibilities to process storage tank permit applications and to respond to complaints concerning these tanks.

The Task Force recommends that permitting authority for non-home heating oil supply tanks be provided to the OSFM. (See above.) The State receives approximately 700 building permit applications annually. The vast majority of these projects include the installation or replacement of a heating system. The OSFM estimates that it will be called on to permit approximately 200 new and 200 - 300 replacement supply AST's annually. Additional resources will also be needed to allow the OSFM to undertake the responsibility of enforcing NFPA requirements applying to these supply tanks.

A full-time inspector could perform approximately 250 inspections of new or existing facilities per year. The addition of two full-time inspectors would enable the OSFM to take on new duties associated with the transfer of larger oil supply tanks to the OSFM (both in inspecting new facilities and conducting inspections and responding to any code call concerning existing facilities), and to enforce fire code requirements governing storage tanks. In addition, the OSFM needs an account clerk to send out applications, type inspection reports and permits, and process fees. The Task Force recommends that in combination with the approximately $85,000 currently allocated annually from the Ground Water Oil Clean-up Fund, 3.5 positions in the OSFM be dedicated to work on AST's (specifically, 3.0 positions funded by the Ground Water Oil Clean-up Fund and .5 position funded by a permit increase).

MODA does not join in this recommendation in its entirety. A separate statement by MODA follows the body of this report.

Maine Oil Dealers Association's Exceptions to the Report

The Maine Oil Dealers Association offers below its alternative view on the issues of allocation of resources and SPCC jurisdiction. In an attempt to keep the main report coherent, and to keep our views concentrated, areas in the report for which we have a differing opinion are simply noted and not infused with our opinion. Our differences are described in more detail below. We would substitute our answer and discussion to Section 2, Question #3 (page 17) with what is stated below and would change the noted areas earlier in the report with the appropriate view expressed below.

Question #3: Are current resources adequate to regulate non-home heating AST's properly?

Answer: MODA has concluded that additional resources are needed for the Office of State Fire Marshal to adequately enforce existing state laws pertaining to ASTs.

Discussion:

- Enforcement of NFPA AST Requirements:

In addition to the statements in the main body concerning OSFM enforcement, MODA believes that additional OSFM resources would further protect the citizens of Maine, as they would be able to adequately provide the safety assurances needed. Storage of petroleum products aboveground is primarily a public safety issue that includes the prevention of spill and leaks. It should be clear that The National Fire Protection Association AST standards adopted by this State are comprehensive and adequate. These standards are NFPA 30, 30A and 31. Some of the topics included in these regulations include: Tank placement distance requirements; Venting; tank and equipment requirements; Corrosion protection; Tank and piping testing and maintenance; Construction standards; Fire protection; Prevention of overfilling; and standards for piping systems - to name a few.

One of the subsections directly dealing with prevention of spills is titled; "Control of Tanks Spillage From Aboveground Tanks." This section states,

> "*Facilities shall be provided so that any accidental discharge … will be prevented from endangering important facilities, and adjoining property, or reaching waterways.*" NFPA 30 Sec 2-3.3.

By adequately ensuring compliance with the existing OSFM laws and rules we protect the public through greater safety. Due to the primary protection provisions of NFPA regulations, which are designed to prevent spills and leaks and protect the public from these occurrences, one gets the added benefit of environmental protection. Given that the primary duty to the public is safety, we continue to recommend as we did in the original legislation from 2 years ago, that 2 additional OSFM positions be funded to adequately enforce the existing laws.

- Enforcement of SPCC regulations

We recognize that the EPA currently regulates in this area and that EPA enforcement is limited. However, it should be noted that EPA will check a SPCC plan of a Maine facility upon request of the state or an individual.

We do want to point out that this task force has not identified a significant spill problem associated with the existing level of SPCC enforcement performed by the EPA. The Task force has simply recognized that EPA enforcement is limited. Further, the Task Force did not explore ways for the state to request additional assistance from the EPA. Acknowledging the limitations of EPA but not passing judgment on their efficacy, we recommend that the OSFM inspectors, added by this request, in addition to their current review duties when visiting facilities to enforce the OSFM safety laws, also perform a SPCC review to ensure compliance. EPA has a simple five-page checklist for performing such a review. OSFM has stated that they can perform the review but will need adequate personnel. If there appears to be a SPCC issue that is beyond the capacity of the OSFM, the OSFM can enlist the assistance of EPA. EPA must respond to all calls for review.

We believe this recommendation limits the expansion of government, avoids duplication of oversight efforts, and is a more efficient use of State resources that will enhance the protection of the public.

Appendices

1. Interim Task Force Report on Field Constructed Tanks
2. Spill Reports, Home Heating Oil Tanks
3. Home Heating Oil Replacement Program Data
4. Grid of current equipment/operational requirements/Industry Standards
5. List of Industry Standards
6. Spill reports
7. Proposed legislation (SPCC)
8. Proposed legislation (permitting authority for supply tanks to OSFM)